ment that may be obtained after the removal of infected foci in the upper respiratory passages.

Of course not every child with defective hearing will improve on the removal of the tonsils, but every child who has a hearing loss should have a careful physical examination to determine if possible the cause of the condition. An examination which includes the study of the lower and upper tones, as suggested by Doctor Gundrum, is often helpful in determining whether the cause is due to an upper respiratory condition or to some other focus of infection.

Doctor Gundrum is to be commended for drawing the attention of the pediatricians to the fact that an early defect of hearing can readily be detected and often improved surgically.

F. F. Gundrum, M. D. (Medico-Dental Building, Sacramento).—Doctor Gundrum's paper is timely. It brings again to our attention the great desirability of instituting preventive measures in childhood where opportunities for correction are so much greater than in the adult. It seems to me that any method which allows for an earlier appreciation of developing handicaps is to be received with approval and its use extended.

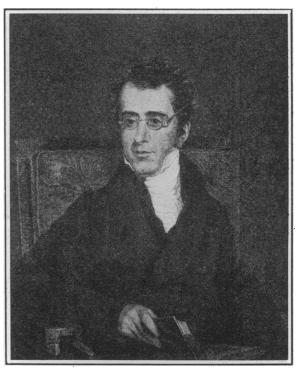
THE LURE OF MEDICAL HISTORY

JOHN BOSTOCK (1773-1846)
Author of the First Clinical Description of Hay Fever

By SAMUEL H. HURWITZ, M. D. San Francisco

ON March 16, 1819, Dr. John Bostock, an English physiologist and clinician, read a paper before the Royal Medical and Chirurgical Society of London on a "Case of a Periodical Affection of the Eyes and Chest" in which he presented to the members the history and clinical symptoms of a seasonal affection which had troubled him since childhood. Nine years later 2 he gave a more detailed account of the disease, applying to it the noncommittal name of "catarrhus aestivus" or summer catarrh, although the affection had, since his earlier publication, obtained the popular name of hay fever.

The recognition of hay fever as a clinical entity dates from Bostock's description of his own symptoms, a fact which has been recognized by the German school in giving to hay fever the designation, Bostock's catarrh. Even though Bostock's achievement is somewhat dimmed by his failure to discern that pollen was the cause of hay fever, the credit for its first clinical recognition justly belongs to him. It is very doubtful whether certain forms of seasonal catarrh described by medical writers in the sixteenth, seventeenth, and eighteenth centuries were genuine instances of hay fever. The cases of Botallus of Pavia (1565) and Binningerus (1673) are often referred to in the literature in support of the view that hay fever was first described several hundred years before Bostock. The former tells of patients who had an intense aversion to roses, since their odor caused them headache, itching of the nose and sneezing, and the latter reports the case of a woman who every year, for a period of several weeks, had symptoms of coryza when the roses bloomed.3 Although it is highly probable that hay fever had occurred long prior to the time when it was first



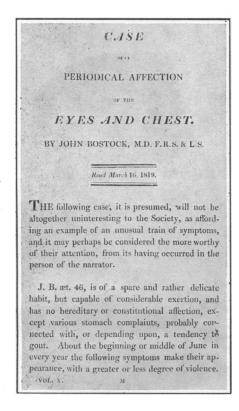
JOHN BOSTOCK, M. D.

noticed by medical writers, it appears to have been mistaken as a mere modification of the common catarrh. This is not remarkable when one reflects that up to the time of Sydenham, in the seventeenth century, rheumatism and gout had been regarded as one and the same disorder and that these diseases have less similarity and are more distinct in their characteristics than are hay fever and common coryza.

Bostock, who was somewhat of a medical historian himself, states in his paper: "One of the most remarkable circumstances respecting this complaint is its not having been noticed as a specific affection until within the last ten or twelve years. Except a single observation of Heberden's, I have not met with anything that can be supposed to refer to it in any author, ancient or modern.' The observation of Heberden to which Bostock refers is to be found in his Commentaries, that great mine of keen medical observation which was the result of a lifetime of conscientious note-taking.4 Speaking of this form of catarrh, Heberden states: "I have known it to return in four or five persons annually in the months of April, May, June, or July, and last a month with great violence."

Although the name of John Bostock will be remembered for his clinical description of hay fever, it is for his contributions to physiology and physiological chemistry that he was held in high esteem during his lifetime. Pettigrew,⁵ in his Biographical Memoirs, has given an excellent narrative of the life and work of John Bostock. Born in Liverpool in 1773, Bostock followed in the footsteps of his father, a practicing physician in that city. In his twentieth year he commenced the study of medicine by spending some time with an

apothecary in order to become familiar with pharmacy; and afterward by attending the practice of the Liverpool General Dispensary. After several years devoted to the study of anatomy in London and of chemistry in Edinburgh, he took his medical degree at the latter university in 1798, when twenty-five years of age. His thesis on this occasion was upon secretion. On leaving Edinburgh Bostock settled in his native town and was elected one of the physicians to the Liverpool General Dispensary and, with Dr. James Currie, an eminent practitioner of that city, took an active part in planning and establishing the Fever Hospital. It would appear, however, that he devoted more time to the study of botany, physiology and chemistry, and to the writing of many papers for vari-



ous medical and scientific journals than he gave to practice. In fact in 1817 he gave up the practice of medicine and determined to devote his attention more particularly to the study of physiology. At the age of forty-four he moved from Liverpool to London. In making this change he was principally influenced by the greater facilities which the metropolis afforded for the pursuit of his chosen work, and for the enjoyment of the society of his scientific friends.

The London group of physicians into whose circle Bostock now entered were among the most famous of the century. The roster of the Royal Medical and Chirurgical Society of that time contains such names as Jenner, Astley Cooper, Matthew Baillie, Abernethy, Benjamin Brodie, Charles Bell, Thomas Young and the "great men of Guy's," Richard Bright and Thomas Addison. Jenner was at that time sixty-eight years old. About twenty, years had elapsed since the publica-

tion of his "Inquiry into the Causes and Effects of the Variolae Vaccinae" and, although it was already fully appreciated that no discovery in medicine was more important to the interests of humanity, yet its practical application in England, as in our country today, was far from general. If Doctor Bostock was present at the meeting of the Medical and Chirurgical Society on November 10, 1819, he heard his colleague, Sir Gilbert Blaine, read a paper on the value and present state of vaccination, in which he stated that "it is one of the reproaches of the country that it has not availed itself so much as any other, of the benefits of vaccination."

When Bostock came to London in 1817, two of John Hunter's famous pupils, Abernethy and Astley Cooper, both in their fifties, were at the height of their careers. The latter had already been surgeon at Guy's Hospital for seventeen years, where he made his epoch-making contributions to the surgery of the vascular system, and Matthew Baillie, who twenty-five years before had written his famous "Morbid Anatomy," was now physician to George III, one of the busiest consultants in London and the last to inherit the "Gold-Headed Cane."

As one of the lecturers on chemistry at Guy's Hospital, Bostock had an opportunity to know intimately two of its brilliant young physicians, Thomas Addison and Richard Bright; the latter became physician to Guy's Hospital in 1820, where he worked for six hours daily in the wards and postmortem room, efforts which were crowned in 1827 by his original description of essential nephritis, which made the name of Bright a household word throughout the world. Doubtlessly stimulated by Bright's work on nephritis, Bostock made chemical analyses of the properties of the urine in many patients with Bright's disease, and he was the first to discover the presence of an excess of urea in the blood of patients suffering from certain diseases of the kidneys.5

Bostock's most noteworthy contributions were made in physiology. His work entitled "An Elementary System of Physiology," published in London in 1823, passed through three editions and was the first systematic and connected view of modern physiology that had been published in England. This and his numerous researches on the chemistry of the body fluids show him to have been "characterized by a bold and ingenious spirit of inquiry."

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REFERENCES

- 1. Bostock, John: Case of a Periodical Affection of the Eyes and Chest, Medico-Chirurgical Transactions, London, 1819, x, 161.
- 2. Bostock, John: Of the Catarrhus Aestivus, or Summer Catarrh, Medico-Chirurgical Transactions, London, 1828, xiv, 437.
- 3. Koessler, K. K.: The Specific Treatment of Hay Fever (Pollen Disease); Forchheimer's Therapeusis of Internal Diseases. New York and London. D. Appleton and Company, 1920.
- 4. Heberden, Guil: Commentarii de Morborum Historia et Curatione, Londini, 1802.
- 5. Pettigrew, Thomas, Joseph: Biographical Memoirs. Whittaker and Company, London, 1839.